

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,639	08/28/2003	Stanley E. Zambahlen	3-5612.4	5556
7590 11/02/2005		EXAMINER		
Richard J. Johnson 5612 18th St N			BATSON, VICTOR D	
Arlington, VA 22205-2813			ART UNIT	PAPER NUMBER
3 ,			3671	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)		
	10/649,639	ZAMBAHLEN ET AL.		
Office Action Summary	Examiner	Art Unit		
	Victor Batson	3671		
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tirr iill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I.  lely filed  the mailing date of this communication.  D (35 U.S.C. § 133).		
Status				
Responsive to communication(s) filed on 26 Ju     This action is <b>FINAL</b> . 2b) ☐ This     Since this application is in condition for allowant closed in accordance with the practice under E	action is non-final. ace except for formal matters, pro			
Disposition of Claims				
4) ☐ Claim(s) 12-22 is/are pending in the application 4a) Of the above claim(s) 23 is/are withdrawn fr 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 12-22 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examine	rom consideration.			
10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the confidence of th	epted or b) objected to by the formula of the following of the best on is required if the drawing (s) is objected to by the formula of the drawing (s) is objected to by the formula of the drawing (s) is objected to by the formula of the formula of the drawing (s) is objected to by the formula of the formu	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6) Other:			

Art Unit: 3671

#### **DETAILED ACTION**

## Claim Objections

Claims 12-22 are objected to because of the following informalities: In claim 12 line 3, the phrase "as view in plan" is grammatically incorrect and should probably be changed to "as viewed in plan". In claim 1 line 15, the phrase "whereby to rigidly support" is grammatically incorrect. In claim 1 line 18, "the view" lacks proper antecedent basis. In claim 20 line 12, "the top of said scraper" lacks proper antecedent basis. Appropriate correction is required.

#### Claim Rejections - 35 USC ∋ 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 12,18,20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Best of Farm Show 89 in view of Gruner (1,088,414).

Best of Farm Show '89 discloses a generally semicircular shaped scraping blade as viewed in plan having forwardly disposed end sections, with a crossbeam having spaced lower three-point hitch connections and a support tower including an upper three-point hitch connection including rigid strut means extending downwardly and rearwardly from the support tower and secured to an upper portion of the blade. Best of Farm Show '89 however lacks the blade being perpendicular throughout its length to the surface being scraped, and lacks the blade being metal.

Art Unit: 3671

Gruner teaches that it is known in the agricultural art to form a scraping blade such that it is perpendicular throughout it's length. It is noted that Gruner further teaches that the blade can be constructed of metal. It is noted that Gruner does not disclose the type of metal that is used.

Therefore, Gruner shows that a semi-circular, metal, perpendicular scraper blade is an equivalent structure known in the art. Therefore, because these two scraper blades were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the scraper blade of Gruner for the scraper blade of Best of Farm Show '89.

Regarding the limitation of the blade being non-hardened metal, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the blade out of non-hardened metal since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Additionally, the examiner takes Official Notice that it is known in the art to form scraper blades out of non-hardened metal as it is less expensive to manufacture than high-strength metals. To substitute non-hardened metal for an undisclosed type of metal would have been an obvious functional equivalent. Similarly, to form a scraper blade out of non-hardened metal would have been obvious because it is economical to manufacture and since it is known in the art to form scraper blades out of non-hardened metal (see conclusion below).

Art Unit: 3671

2. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Best of Farm Show '89 in view of Gruner (1,088,414) as applied to claims 12,18,20 above, and further in view of Akers (1,054,483).

Best of Farm Show '89 as modified by Gruner, discloses a scraper blade as described previously, but lacks using a wear strip.

Akers et al. teaches that it is old and well known in the art to use a continuous wear strip 3 having a flat lower sliding surface with a scraping blade as shown in figure 4. The use of a wear strip with a scraping blade is notoriously old and well known in the art as it extends the life of the scraper blade. Concerning claim 6, Akers et al. appears

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a wear strip similar to that of Akers et al. with the scraper

to show the wear strip 3 being bolted to the blade.

blade of Gruner, to extend the life of the scraper blade.

Concerning claims 14 & 16, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the wear strip out of metal or polyurethane, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

3. Claims 12,18-22 are rejected under 35 U.S.C. 103 as being unpatentable over Gruner (1,088,414) in view of McGee (3,034,238).

Art Unit: 3671

Gruner discloses a scraper comprising a generally semicircular shaped metal scraping blade being of uniform thickness metal and having a lower scraping portion provided with a continuous flat metal surface, with the lower scraping portion being configured to be perpendicular throughout its length to a scraping surface. It is noted that Gruner does not disclose the type of metal that is used.

McGee discloses a three-point hitch means including a crossbeam 22 connected to the forwardly disposed end sections 20, and rigid strut means 78 extending downwardly and rearwardly from a support tower that are secured to an upper portion of the blade. McGee further discloses a support tower using a pair of laterally spaced upright members connected at their upper ends to a transverse connecting bar (shown in figure 1 between members 76 & 75). The crossbeam, strut means and support tower with connecting bar add rigidity to the overall blade structure, and inherently limits overflow of debris from the scraper.

Gruner discloses the claimed invention except that a chain type hitching structure instead of a hitch tower with cross beam type hitching structure was used. McGee shows that a hitch tower with cross beam type hitching structure is an equivalent structure known in the art. Therefore, because these two hitching means were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute a hitch tower with cross beam type hitch means for a chain type hitch means.

Regarding the limitation of the blade being non-hardened metal, it would have been obvious to one having ordinary skill in the art at the time the invention was made

to form the blade out of non-hardened metal since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Additionally, the examiner takes Official Notice that it is known in the art to form scraper blades out of non-hardened metal as it is less expensive to manufacture than high-strength metals. To substitute non-hardened metal for an undisclosed type of metal would have been an obvious functional equivalent. Similarly, to form a scraper blade out of non-hardened metal would have been obvious because it is economical to manufacture and since it is known in the art to form scraper blades out of non-hardened metal (see conclusion below).

4. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gruner (1,088,414) in view of McGee (3,034,238) as applied to claims 12,18-22 above, and further in view of Akers (1,054,483).

Gruner as modified by McGee, discloses a scraper blade as described previously, but lacks using a wear strip.

Akers et al. teaches that it is old and well known in the art to use a continuous wear strip 3 having a flat lower sliding surface with a scraping blade as shown in figure 4. The use of a wear strip with a scraping blade is notoriously old and well known in the art as it extends the life of the scraper blade. Concerning claims 15 & 17, Akers et al. appears to show the wear strip 3 being bolted to the blade.

Art Unit: 3671

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a wear strip similar to that of Akers et al. with the scraper blade of Gruner, to extend the life of the scraper blade.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the wear strip out of metal or polyurethane, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

5. Claims 12-18,20 are rejected under 35 U.S.C. 103 as being unpatentable over Best of Farm Show '89 in view of Akers et al. (1,054,483).

Best of Farm Show '89 discloses generally semicircular shaped scraping blade as viewed in plan having forwardly disposed end sections, with a crossbeam having spaced lower three-point hitch connections and a support tower including an upper three-point hitch connection including rigid strut means extending downwardly and rearwardly from the support tower and secured to an upper portion of the blade. Best of Farm Show '89 however lacks the blade being perpendicular throughout its length to the surface being scraped, and lacks the blade being metal.

Akers et al. teaches that it is known in the agricultural art to form a scraping blade such that it is perpendicular throughout it's length. It is noted that Akers et al. further teaches that the blade can be constructed of any suitable material. Concerning claim 13, Akers et al. teaches that it is known to use a continuous wear strip 3 having a

Art Unit: 3671

flat lower sliding surface as shown in figure 4. Concerning claims 15 & 17, Akers et al. appears to show the wear strip 3 being bolted to the blade 1.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the blade out of non-hardened metal and the wear strip out of metal or polyurethane, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Additionally, the examiner takes Official Notice that it is known in the art to form scraper blades out of non-hardened metal as it is less expensive to manufacture than high-strength metals. Therefore, to form a scraper blade out of non-hardened metal would have been obvious because it is less expensive to manufacture and since it is known in the art to form scraper blades out of non-hardened metal (see conclusion below).

6. Claims 19,21,22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Best of Farm Show '89 in view of Akers et al. (1,054,483) as applied to claims 12-18,20 above, and further in view of McGee (3,034,238).

Best of Farm Show '89 as modified by Akers et al. discloses a device as described previously, but lacks the three-point hitch connections including a support tower having laterally spaced upright members connected at their upper ends by a *transverse connecting bar*.

Art Unit: 3671

McGee discloses a three-point hitch connection as described previously including a support tower having laterally spaced upright members connected at their upper ends by a transverse connecting bar.

Best of Farm Show '89 as modified by Akers et al. discloses the claimed invention except that the hitching structure of Best of Farm Show '89 lacks the laterally spaced upright members being connected at their upper ends by a transverse connecting bar. McGee shows that a hitching means with a hitch tower having a transverse connecting bar is an equivalent structure known in the art. Therefore, because these two hitching means were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the hitch means of McGee for the hitch means of Best of Farm Show '89.

### Response to Arguments

Applicant's arguments filed 7/26/05 have been fully considered but they are not persuasive. Applicant argues that there is no reason or suggestion of combining the references. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation

Art Unit: 3671

found in the knowledge generally available to one of ordinary skill in the art was used as clearly set forth in the rejections above.

In response to applicant's argument that the prior art would be useless on a concrete surface, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Regardless of applicant's unsubstantiated and untested opinion, all of the prior art "scrapers" would be able to "scrape", on any hardened ground surface such as dirt, concrete or asphalt.

Applicant's arguments that it would not be obvious to replace the chains of Gruner with the three-point hitch of McGee because the scraper of Gruner is intended to float are not persuasive. The examiner notes that it is notoriously old and well known in the art for a three-point hitch connection to have the ability to allow the towed device to float.

Applicant's arguments that blade of Gruner would operate quite differently from the way it was intended and would require significant reengineering to be operative if it were fitted with a hitch instead of chains is interesting but not persuasive. The examiner notes that the prior art is filled with scraper blades of various types, including box scrapers, which use hitch type connections. Furthermore, in addition to providing a float condition, three-point hitch connections that use hydraulics can also be used to tilt and accurately position the towed implement. Therefore, to replace a chain connection with a modern three-point hitch connection on an implement such as a scraper, is

Art Unit: 3671

considered to be obvious to one of ordinary skill in the art because such a modification would provide accurate positioning of the scraper by a known and popular connection often used in the art.

The examiner notes applicant's arguments that the only material difference between the instant claims and the claims on which a previous decision by the Board of Patent Appeals and Interferences was made affirming the rejection of the claims, is that the blade is constructed from non-hardened metal.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The examiner notes that Middleton (3,994,081), Curtis (4,723,609), Ciula (4,845,866), Taylor (5,729,920) and Ciula (5,088,215) disclose forming scraper blades out of mild steel. Additionally, Lucas et al. (4,194,757) and Meinert et al. (4,193,458) disclose three-point hitch connections with a float function.

Newly submitted claim 23 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The newly submitted claim 23 is directed to a method or removing manure which is restrictable from the original claims directed to a scraper.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 23 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Art Unit: 3671

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Batson whose telephone number is (571) 272-6987. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Will can be reached on (571) 272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 29, 2005

Victor Batson
Primary Examiner
Art Unit 3671

into Bater